

Work Order ID 140093

140093

Page 1

Thursday, December 17, 2015 3:42:21 PM

Item ID: D206-817-011 Accept *N900040100* Setup Start *NS1*
 Revision ID: Stop *NS2*
 Item Name: Screw-In Windshield Modification
 Start Date: 12/8/2015 Start Qty: 2.00 *2* Cust Item ID:
 Required Date: 12/17/2015 Req'd Qty: 2.00 *2* Customer:
 Reference:

Approvals: Process Plan: MLJ Date: DEC 22 2015 Tooling: _____ Date: _____ Run Start *NR1*
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
DSI9659	A								
DSI9687	A								
IIN-D206-817	D								
100	Document Control	0.00							
100	DOCUMENT CONTROL								
DC	Memo	0.00							
Doc.Control -USB or Paperwork	Photocopy bluefile & type labels per PPP D206-817-011 CHG006								
110	Pick Kit	0.00							
110									
Packaging	Memo	0.00							
Packaging									

MLJ 1601-22
 (2)

X2 DAS
 27
 9-89
 FEB 02 2016

2
 DAS
 6
 9-89
 JAN 22 2016
 DAS
 28
 9-89

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐																																																													
Date :		Step #:		QTY Effective :				MRB (QS1042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval																																																									
Description Work Order Deviation				Disposition																																																													
Root Cause		FAULT CATEGORY																																																															
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐	Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐	Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐	Equip/Tooling ☐	Supplier, ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐	Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐	Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐	Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐	Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐	LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐	Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐	Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____			
Misidentified ☐	Past Due ☐																																																																

Work Order ID 140093

Thursday, December 17, 2015 3:42:21 PM

140093

Page 2

Item ID: D206-817-011

Accept

N900040100Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: Screw-In Windshield Modification

Start Date: 12/8/2015 Start Qty: 2.00 ***2***

Cust Item ID:

Required Date: 12/17/2015 Req'd Qty: 2.00 ***2***

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Run Start ***NR1***
Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
120	QC4- 100% Inspect kits for completeness	0.00							
120									
QC	Memo	0.00							
Quality Control									
130	Packaging	0.00							
130									
Packaging	Memo	0.00							
Packaging	Identify and pack for shipping as per PPP D206-817-011 Location: FG033								
140	QC21- Final Inspection - Work Order Release	0.00							
140									
QC	Memo	0.00							
Quality Control									

FEB 02 2016

X2 Z

DAS
27
9-89

FEB 02 2016

MCS

FEB 02 2016

MCS

FEB 02 2016

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition		Completed By _____ Lead hand / Supervisor Approval Verification _____ QC / QA Coordinator Approval _____	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
		OTHER : ☐			

Picklist Print

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Page 1

Work Order ID: 140093

140093

Parent Item: D206-817-011

D206-817-011

Parent Item Name: Screw-In Windshield Modification

Start Date: 12/8/2015

Required Date: 12/17/2015

Start Qty: 2.00

Required Qty: 2.00

Comments: IPP REV:A 12.02.14 NEW ISSUE DD VERF: IPP REV:B
12.05.09 AS PER IIN REV.C DD VERF:EC IPP REV:C 12.06.12
ECN 12-602 DD VERF:EC IPP REV:D 13.04.23 as per IIN
dwg rev.D DD verf:JLM IPP REV:E 13.06.26 as per
CHG004/DSI9659 DD VERF:JFS IPP REV:F 14.03.24 AS PER DSI 9687
DD VERF:JLM IPP REV:G 15.01.06 now @ chg006/ecn14-547 DD
verf:JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued DAS	Status
D4541-1		Manufactured	No			110	Each	9.0000	1	2		6 9-89	
D4541-1									**				DAS 28 9-89
Bracket													
				<u>Location</u>				<u>Loc Qty</u>		<u>Loc Code</u>			
				ST626				9					
				127095				9		2			
D4541-2		Manufactured	No			110	Each	10.0000	1	2		6 9-89	
D4541-2									**				DAS 28 9-89
Bracket													
				<u>Location</u>				<u>Loc Qty</u>		<u>Loc Code</u>			
				ST626				10					
				127096				10		2			
D4542-1		Manufactured	No			110	Each	7.0000	1	2			
D4542-1									**				DAS 6 9-89
Retainer, Inner, LH													
				<u>Location</u>				<u>Loc Qty</u>		<u>Loc Code</u>			
				ST628				7					
				129997				3		2			
				139255				4					

JAN 25 2016

DAS
28
9-89

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :				MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval	
Description Work Order Deviation				Disposition					
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐							
		OTHER : ☐							

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Page 2

Work Order ID: 140093

140093

Parent Item: D206-817-011

D206-817-011

Parent Item Name: Screw-In Windshield Modification

Start Date: 12/8/2015

Required Date: 12/17/2015

Start Qty: 2.00

Required Qty: 2.00

D4542-2

Manufactured No

110

Each

11.0000

1 2

DAS

6

9-89

DAS

28

9-89

D4542-2

Retainer, Inner, RH

DAS

27

9-89

Location

Loc Qty

Loc Code

ST628

11

130038

5

139244

6

DAS

6

9-89

D4541-3

Manufactured No

110

Each

12.0000

1 2

DAS

28

9-89

D4541-3

Bracket

Location

Loc Qty

Loc Code

ST627

12

127097

12

DAS

6

9-89

DAS

28

9-89

D4541-4

Manufactured No

110

Each

8.0000

1 2

DAS

6

9-89

DAS

28

9-89

D4541-4

Bracket, RH

Location

Loc Qty

Loc Code

ST627

8

127098

8

DAS

6

9-89

DAS

28

9-89

D4541-5

Manufactured No

110

Each

10.0000

1 2

DAS

6

9-89

DAS

28

9-89

D4541-5

Bracket, LH

Location

Loc Qty

Loc Code

ST635

10

127099

10

JAN 25 2016

DAS

27

9-89

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :				MRB (QS1042) Approval	
Description Work Order Deviation				Disposition				Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY							
Environment ☐	☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐			
Design ☐	☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐			
Doc/Data ☐	☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐			
Equip/Tooling ☐	☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐			
Handling/Pre ☐	☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐			
Material ☐	☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐			
Internal Transport ☐	☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐			
Tribal Knowledge ☐	☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐			
LOA ☐	☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐			
Substation ☐	☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐			
Past Expiry Date ☐	☐	Manufacturing Process ☐	OTHER : _____						
Misidentified ☐	☐	Past Due ☐							

Picklist Print

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Page 3

Work Order ID: 140093

140093

Parent Item: D206-817-011

D206-817-011

Parent Item Name: Screw-In Windshield Modification

Start Date: 12/8/2015

Required Date: 12/17/2015

Start Qty: 2.00

Required Qty: 2.00

D4541-6 Manufactured No

110 Each

7.0000

1 2

D4541-6

Bracket, RH

**

DAS
6

9-89 DAS
28
9-89

DAS
27
9-89

Location

Loc Qty

Loc Code

ST635

7

127100

5

139253

2

D4541-7 Manufactured No

110 Each

7.0000

1 2

D4541-7

Bracket

**

DAS
6
9-89

DAS
27
9-89

Location

Loc Qty

Loc Code

ST635

7

127101

3

139254

4

D4541-8 Manufactured No

110 Each

8.0000

1 2

D4541-8

Bracket

**

DAS
6
9-89

DAS
27
9-89

Location

Loc Qty

Loc Code

ST635

8

127102

8

D4542-3 Manufactured No

110 Each

15.0000

2 4

D4542-3

Retainer, Inner

**

DAS
6
9-89

DAS
27
9-89

Location

Loc Qty

Loc Code

ST633

15

130937

3

139256

12

DAS
28
9-89

DAS
28
9-89

JAN 25 2016

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :				MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval	
Description Work Order Deviation				Disposition					
Root Cause		FAULT CATEGORY							
Environment ☐	☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐			
Design ☐	☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐			
Doc/Data ☐	☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐			
Equip/Tooling ☐	☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐			
Handling/Pre ☐	☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐			
Material ☐	☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐			
Internal Transport ☐	☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐			
Tribal Knowledge ☐	☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐			
LOA ☐	☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐			
Substation ☐	☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐			
Past Expiry Date ☐	☐	Manufacturing Process ☐	OTHER : ☐						
Misidentified ☐	☐	Past Due ☐							

Picklist Print

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Work Order ID: 140093

140093

Parent Item: D206-817-011

D206-817-011

Parent Item Name: Screw-In Windshield Modification

Start Date: 12/8/2015

Required Date: 12/17/2015

Start Qty: 2.00

Required Qty: 2.00

D4542-5 Manufactured No

110 Each

13.0000

2 4

D4542-5

Retainer, Inner

DAS
27
9-89 82

Location

Loc Qty

Loc Code

st631

13

139249

13

110 Each

14.0000

2 4

D4542-7

Manufactured No

D4542-7

Retainer, Inner

DAS
27
9-89 82

Location

Loc Qty

Loc Code

st631

14

130517

4

139250

10

110 Each

4.0000

1 2

D4543-1

Manufactured No

D4543-1

Retainer, LH Outer (Lower)

DAS
27
9-89 2X

Location

Loc Qty

Loc Code

st630

4

130518

4

110 Each

10.0000

1 2

D4543-2

Manufactured No

D4543-2

Retainer, Outer, RH

DAS
27
9-89 2X

Location

Loc Qty

Loc Code

st630

10

130520

5

139251

5

DAS
6
9-89 28
9-89

DAS
6
9-89 28
9-89

DAS
6
9-89 28
9-89

DAS
6
9-89 28
9-89

JAN 25 2016

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval		
Description Work Order Deviation				Disposition					
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐		OTHER : ☐					

Picklist Print

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Work Order ID: 140093

140093

Parent Item: D206-817-011

D206-817-011

Parent Item Name: Screw-In Windshield Modification

Start Date: 12/8/2015

Required Date: 12/17/2015

Start Qty: 2.00

Required Qty: 2.00

D4543-3 Manufactured No

110 Each

11.0000

1 2

D4543-3

Retainer, Outer, LH

**

DAS
6
9-89

DAS
27
9-89

Location

Loc Qty

Loc Code

ST632

11

127105
139243

6
5

2

DAS
28
9-89

D4543-4 Manufactured No

110 Each

7.0000

1 2

D4543-4

Retainer, Outer, RH

**

DAS
6
9-89

DAS
27
9-89

Location

Loc Qty

Loc Code

ST632

7

130521
139252

5
2

2

DAS
28
9-89

D4543-5 Manufactured No

110 Each

7.0000

1 2

D4543-5

Retainer, Outer, LH

**

DAS
6
9-89

DAS
27
9-89

Location

Loc Qty

Loc Code

ST634

7

127107

7

2

DAS
28
9-89

D4543-6 Manufactured No

110 Each

9.0000

1 2

D4543-6

Retainer, Outer, RH

**

DAS
6
9-89

DAS
27
9-89

Location

Loc Qty

Loc Code

ST634

9

127108

9

2

DAS
28
9-89

JAN 2 5 2016

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :				MRB (QS1042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval	
Description Work Order Deviation				Disposition					
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐		OTHER : ☐					

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Page 6

Work Order ID: 140093

140093

Parent Item: D206-817-011

D206-817-011

Parent Item Name: Screw-In Windshield Modification

Start Date: 12/8/2015

Required Date: 12/17/2015

Start Qty: 2.00

Required Qty: 2.00

D4544-1 Manufactured No

110 Each 7.0000

D4544-1
Retainer, Center

**

DAS
6
9-89
DAS
28
9-89

Location Loc Qty Loc Code

ST629 7

130522 7

D4594-1 Manufactured No

110 Each 8.0000

D4594-1
Plate

**

DAS
6
9-89
DAS
28
9-89

Location Loc Qty Loc Code

ST633 8

133135 2

139258 6

DAS
27
9-89

D4595-150-13 Manufactured No

110 Each 349.0000

D4595-150-13
Sealant Tape (13' Long)

**

DAS
6
9-89
DAS
28
9-89

Location Loc Qty Loc Code

MF 336

119766 336

pk16 13

B120054 13

AN525-10R7 Purchased No

110 Each 549.0000

AN525-10R7
SCREW

**

DAS
6
9-89
DAS
28
9-89

Location Loc Qty Loc Code

CCK006 500

m133640 200

m133733 300

ST329 49

m131697 49

181 JAN 25 2016

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Page 6

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QS1042) Approval	
Description Work Order Deviation		Disposition			
				Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
OTHER : ☐					

Picklist Print

Thursday, December 17, 2015 3:42:21 PM

Page 7

Work Order ID: 140093

Parent Item: D206-817-011

Parent Item Name: Screw-In Windshield Modification

140093

D206-817-011

Start Date: 12/8/2015

Required Date: 12/17/2015

Start Qty: 2.00

Required Qty: 2.00

MS20426AD3-4

Purchased

No

110

Each

2,970.000

190

380

MS20426AD3-4

RIVET

Smb 27

Location

Loc Qty

Loc Code

GA

2815

m131697

2815

ST312

155

m127432

155

110

Each

291.0000

43

86

MS21059L08

Purchased

No

MS21059L08

Nut

Smb 2X

Location

Loc Qty

Loc Code

CCK007

200

m133686

200

ST299

87

m131697

87

ST303

4

m131624

4

110

Each

512.0000

93

186

MS21059L3K

Purchased

No

MS21059L3K

Nutplate

Smb 2X

Location

Loc Qty

Loc Code

GA

160

m127635

160

ST300

352

m131677

352

DAS

6

JAN 23 2016

DAS

28

9-89

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Shop Packet Print

Page 7

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :				MRB (QS1042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval	
Description Work Order Deviation				Disposition					
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐							
		OTHER : ☐							

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Page 8

Work Order ID: 140093

140093

Parent Item: D206-817-011

D206-817-011

Parent Item Name: Screw-In Windshield Modification

Start Date: 12/8/2015

Required Date: 12/17/2015

Start Qty: 2.00

Required Qty: 2.00

MS21061L08

Purchased

No

110

Each

58.0000

10

20

MS21061L08

Nutplate

Smb 2x

Location

Loc Qty

Loc Code

ST300

58

m131697

58

MS21075L08

Purchased

No

110

Each

232.0000

1

2

MS21075L08

ANCHOR NUT

Smb 2x

Location

Loc Qty

Loc Code

ST298

123

103053

55

M132035

68

ST300

109

M128635

109

MS27039-08-10

Purchased

No

110

Each

603.0000

42

84

MS27039-08-10

Screw

Smb 2x

Location

Loc Qty

Loc Code

ST278

603

m128799

603

NAS1149DN832J

Purchased

No

110

Each

1,055.000

42

84

NAS1149DN832J

Washer

Smb X2

Location

Loc Qty

Loc Code

CA

84

M129499

84

ST270

971

M131697

971

418
6
9-89

DAS
28
9-89

418
6
9-89

DAS
28
9-89

418
6
9-89

DAS
28
9-89

JAN 2 5 2016

418
6
9-89

Thursday, December 17, 2015 3:42:21 PM

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Page 8

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :				MRB (QS1042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval	
Description Work Order Deviation				Disposition					
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐							
		OTHER : ☐							

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Page 9

Work Order ID: 140093

140093

Parent Item: D206-817-011

D206-817-011

Parent Item Name: Screw-In Windshield Modification

Start Date: 12/8/2015

Required Date: 12/17/2015

Start Qty: 2.00

Required Qty: 2.00

MS21061L3K

Purchased

No

110

Each

46.0000

2 4

MS21061L3K

NUT PLATE

SMB X2

**

Location

Loc Qty

Loc Code

GA

46

m131467

46

DAS
6
9-89

DAS
28
9-89

4

JAN 22 2016

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :				MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval	
Description Work Order Deviation				Disposition					
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐							
		☐ OTHER : _____							

DART SERVICE INSTRUCTION
TO AMEND INSTALLATION INSTRUCTIONS IIN-D206-817 REV. D
AND INSTRUCTIONS FOR CONTINUED AIRWORTHINESS ICA-D206-817 REV.2
OR LATER APPROVED REVISION

REF. TCCA STC: SH12-3
REF. FAA STC: SR03091NY
REF. EASA STC: 10039042

1.0 PURPOSE

AT CHG 004 AND SUBSEQUENT, THE D206-817-011 SCREW-IN WINDSHIELD MODIFICATION KIT WILL NOW INCLUDE 2x D4595-150-13 SEALANT TAPE (13' LONG) IN LIEU OF 1x D4595-150-25 SEALANT TAPE (25' LONG) IN ORDER TO AVOID THE EXPIRATION OF UNUSED TAPE SHOULD ONLY ONE REPLACEMENT WINDSHIELD BE NECESSARY.

2.0 PARTS LIST

WAS:

QTY -011	Part Number	Description
X	D206-817-011	SCREW-IN WINDSHIELD MODIFICATION KIT (MODIFIES BOTH LH & RH WINDSHIELDS)
1	D4595-150-25	SEALANT TAPE (25' LONG)

IS:

QTY -011	Part Number	Description
X	D206-817-011	SCREW-IN WINDSHIELD MODIFICATION KIT (MODIFIES BOTH LH & RH WINDSHIELDS)
2	D4595-150-13	SEALANT TAPE (13' LONG)

3.0 INSTALLATION

INSTALL THE D4595-150-13 SEALANT TAPE IN THE SAME WAY AS THE D4595-150-25 SEALANT TAPE PER IIN-D206-817 REV. D OR LATER APPROVED REVISION.

4.0 WEIGHT AND BALANCE

THIS CHANGE HAS NO EFFECT ON THE WEIGHT AND BALANCE.

CANADA
DEPARTMENT OF TRANSPORT
AIRCRAFT CERTIFICATION
BRANCH
DAO # 01-O-01

APPROVED
BY: *D. Shepherd*
D. SHEPHERD (DE # 02)

DATE: 13.06.20
CERT. NO.: SH12-3
ISSUE NO.: 1

A	NEW ISSUE	03	13.06.20
REV.	DESCRIPTION	BY	DATE
DESIGN	03	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	03		
CHECKED	10	DRAWING NO.	REV. A
MFG. APPR.	N/A	DSI 9659	SHEET 1 OF 1
APPROVED	03	TITLE	SCALE
DE APPR.	11	SEALANT TAPE	NTS
DATE	13.06.20	COPYRIGHT © 2013 BY DART AEROSPACE LTD. THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

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WITHOUT NOTICE
WORK ORDER
140093 MWS
15-12-22

DART SERVICE INSTRUCTION

TO AMEND INSTALLATION INSTRUCTIONS IIN-D206-817 REV. D
& INSTRUCTIONS FOR CONTINUED AIRWORTHINESS ICA-D206-817 REV. 2

REF. TCCA STC SH12-3
REF. FAA STC SR03091NY
REF. EASA STC 10039042

1.0 PURPOSE

THE PURPOSE OF THIS DART SERVICE INSTRUCTION (DSI) IS TO FACILITATE INSTALLATION OF THE RETAINERS ON THE LOWER PORTION OF THE WINDSHIELD, FOR D206-817-011 KITS AT CHG 005 OR LATER, BY REPLACING THE RIGID D4545-041/-042 RETAINER ASSEMBLIES WITH SEPARATE BRACKETS AND RETAINERS THAT ARE ASSEMBLED BY THE INSTALLER AND ALLOW FOR EASIER ADJUSTMENT.

2.0 PARTS LIST

(IS)

QTY -011	PART NUMBER	DESCRIPTION
X	D206-817-011	SCREW IN WINDSHIELD MODIFICATION KIT (MODIFIES BOTH LH & RH WINDSHIELDS)
1	D4541-1	BRACKET
1	D4541-2	BRACKET
1	D4542-1	RETAINER
1	D4542-2	RETAINER
190	MS20426AD3-4	RIVET
43	MS21059L08	NUTPLATE
93	MS21059L3K	NUTPLATE
2	MS21061L3K	NUTPLATE
42	MS27039-0810	SCREW
42	NAS1149DN832J	WASHER

(ADDED)

(WAS)

QTY -011	PART NUMBER	DESCRIPTION
X	D206-817-011	SCREW IN WINDSHIELD MODIFICATION KIT (MODIFIES BOTH LH & RH WINDSHIELDS)
1	D4545-041	RETAINER, LH INNER (LOWER)
1	D4545-042	RETAINER, RH INNER (LOWER)
112	MS20426AD3-4	RIVET
23	MS21059L08	NUTPLATE
56	MS21059L3K	NUTPLATE
22	MS27039-0810	SCREW
22	NAS1149DN832J	WASHER

CANADA
DEPARTMENT OF TRANSPORT
AIRCRAFT CERTIFICATION
BRANCH
DAO # 01-O-01

APPROVED

BY: 
D. SHEPHERD (DE # 02)

DATE: 14.03.18
CERT. NO.: SH12-3
ISSUE NO.: 1

A	NEW ISSUE	AJS	14.03.18
REV.	DESCRIPTION	BY	DATE
DESIGN	AJS	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	AJS		
CHECKED		DRAWING NO. REV. A	
MFG. APPR.	N/A	DSI 9687 SHEET 1 OF 4	
APPROVED		TITLE SCALE	
DE APPR.		RETAINER UPGRADE NTS	
DATE	14.03.18	COPYRIGHT © 2014 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

3.0 INSTALLATION

IF INSTALLING A D206-817-011 KIT AT CHG 005 OR LATER, STEP 3.3 OF INSTALLATION INSTRUCTIONS IIN-D206-817 REV D IS MODIFIED IS FOLLOWS:

- 3.3 Install Dart inner retainers. It is acceptable to hand form retainers as required to allow fit. Retainers should be located so that they are approximately flush with the aircraft skin. Locate retainers and transfer drill $\varnothing 0.128$ " from aircraft frame. Locate as follows, using Figure 3-2 as reference:
- a) Locate D4541-1/-2 Brackets along the bottom window frame flush against the door pillars. The Bracket should be oriented with the hole pattern for the MS21061L3K nutplate (the non-symmetric nutplate, ref) near the door post. See Figure 3-3 for reference.
 - b) Locate D4541-3/-4 Brackets on the door pillars, above the -1/2 Brackets. See Figure 3-3.
 - c) Locate D4541-5/-6 Brackets above the -3/-4 retainers. See Figure 3-4.
 - d) Locate D4541-7/-8 Brackets along the top edge, with one side aligned with the center column. See Figure 3-4.
 - e) Relocate the 206-031-112-039 (or equiv.) clip removed at step 3.2(g) per Figure 3-3.

Install brackets wet with Sikaflex-241/-291 or Proseal 890 or MIL-S-8802 sealant between retainers and a/c frame. Fasten D4541-1/-2 Lower Inner Brackets with CR3214-4 (or NAS9301B or M7885/2) rivets and NAS1149DN432J (or 140-001-1 or AN960JD4 or equiv.) washers. Fasten D4541-X Brackets with MS20600AD4 rivets. Reinstall clip (206-031-112-039 or equiv.) with CR3213-4 rivets. See Figure 3-3 for reference.

*Note: Due to variations in airframes the D4541-X Brackets have been designed with extra material for ease of installation and to maintain a good edge distance. Excess material may be trimmed. Touch-up trimmed parts with alodine 1200/1201 per MIL-C-5541.

- 3.4 Locate D4542-X Retainers onto the D4541-X Brackets as follows, see Figures 3-3 & 3-4 for reference:

- a) Locate D4542-1 Retainers onto the D4541-1/-2 Brackets
- b) Locate D4542-3 Retainers onto the D4541-3/-4 Brackets
- c) Locate D4542-5 Retainers onto the D4541-5/-6 Brackets
- d) Locate D4542-7 Retainers onto the D4541-7/-8 Brackets

Hand form D4541-X Brackets and/or D4542-X as required to fit profile of windshield. Locate and transfer drill rivet holes to D4542-X Retainers and open to $\varnothing 0.098$. Locate and transfer drill screw holes and open to $\varnothing 0.250$ ". Dimple the $\varnothing 0.098$ holes $\varnothing 0.180 \times 100^\circ$ and install MS21059L3K nutplates with MS20426AD3-4 rivets.

*Note: Due to variations in airframes the D4542-5 Retainer has been designed with extra material for ease of installation and to maintain a good edge distance. Excess material may be trimmed. Touch-up trimmed parts with alodine 1200/1201 per MIL-C-5541.

FIGURES 3-2 & 3-3 OF INSTALLATION INSTRUCTIONS IIN-D206-817 REV. D ARE MODIFIED AS SHOWN ON SHEETS 3 AND 4 OF THIS SERVICE INSTRUCTION.

4.0 WEIGHT AND BALANCE

THIS CHANGE HAS NO EFFECT ON THE WEIGHT AND BALANCE.

CANADA DEPARTMENT OF TRANSPORT AIRCRAFT CERTIFICATION BRANCH DAO # 01-O-01	
APPROVED	
BY:	
D. SHEPHERD (DE # 02)	
DATE:	14.03.18
CERT. NO.:	SH12-3
ISSUE NO.:	1

DESIGN	AJS	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	AJS		
CHECKED		DRAWING NO.	REV. A
MFG. APPR.	N/A	DSI 9687	SHEET 2 OF 4
APPROVED		TITLE	SCALE
DE APPR.		RETAINER KIT	NTS
DATE	14.03.18	COPYRIGHT © 2014 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

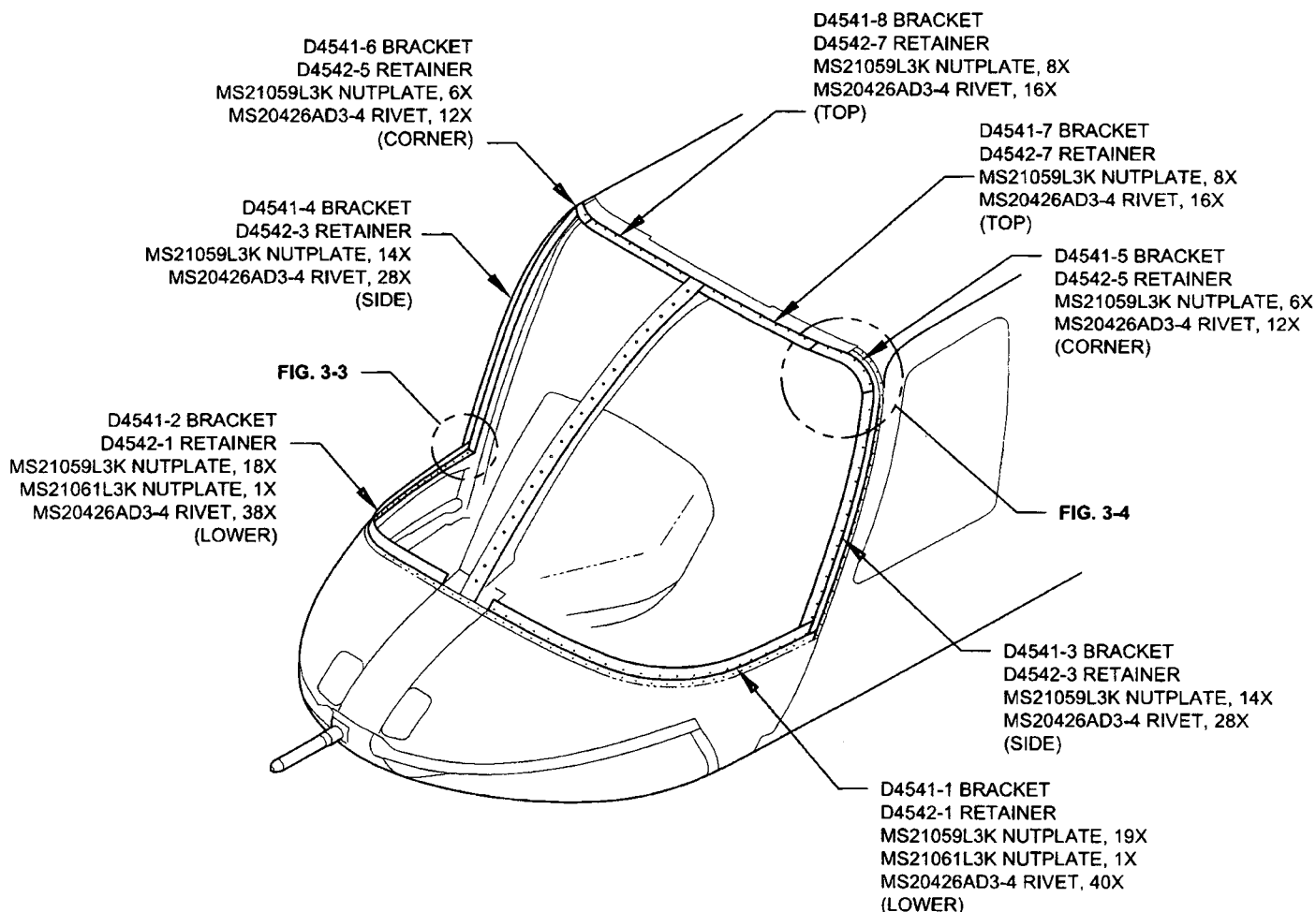


FIGURE 3-2
(REF IIN-D206-817 REV D)

CANADA
DEPARTMENT OF TRANSPORT
AIRCRAFT CERTIFICATION
BRANCH
DAO # 01-O-01

APPROVED

BY:

D. SHEPHERD (DE # 02)

DATE: 14.03.18

CERT. NO.: SH12-3

ISSUE NO.: 1

DESIGN	AJS	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	AJS		
CHECKED		DRAWING NO.	REV. A
MFG. APPR.	N/A	DSI 9687	SHEET 3 OF 4
APPROVED		TITLE	SCALE
DE APPR.		RETAINER KIT	NTS
DATE	14.03.18	COPYRIGHT © 2014 BY DART AEROSPACE LTD	
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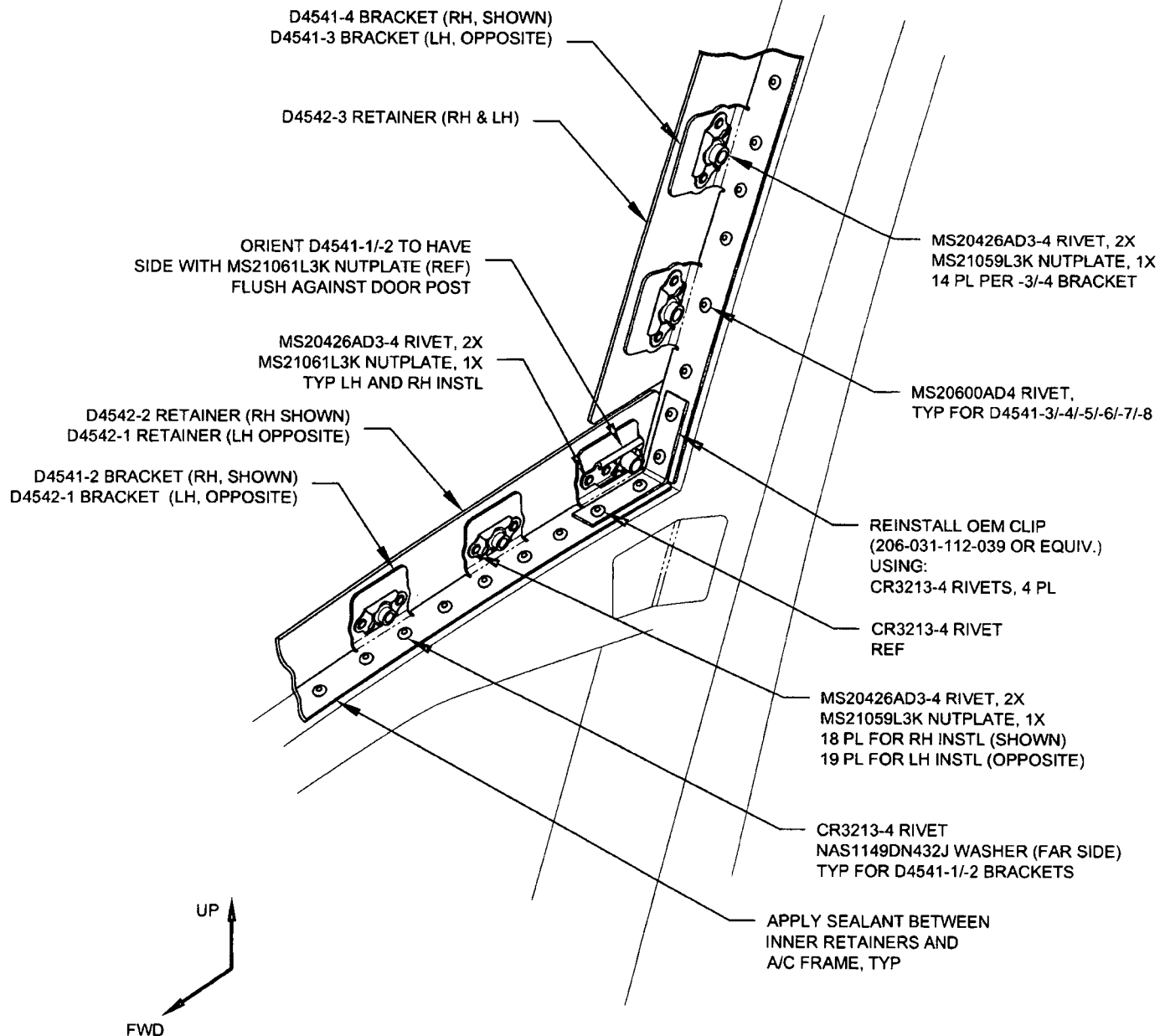


FIGURE 3-3
(REF IIN-D206-817 REV D)

CANADA
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AIRCRAFT CERTIFICATION
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BY: *[Signature]*
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MFG. APPR.	N/A	DSI 9687	SHEET 4 OF 4
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4.0 WEIGHT AND BALANCE

The weight and balance for the D206-817-011 kit is as follows. These are net weights and include the parts removed.

Installation	Weight	LONGITUDINAL	
		Arm	Moment
D206-817-011	2.8 lb	40 in	112 in-lb
Screw-In Windshield Modification Kit	1.3 kg	1.0 m	1.3 m-kg

5.0 PARTS LIST

Qty -011	Part Number	Description
X	D206-817-011	SCREW-IN WINDSHIELD MODIFICATION KIT (MODIFIES BOTH LH & RH WINDSHIELDS)
1	D4541-3	BRACKET, LH
1	D4541-4	BRACKET, RH
1	D4541-5	BRACKET, LH
1	D4541-6	BRACKET, RH
1	D4541-7	BRACKET, LH
1	D4541-8	BRACKET, RH
2	D4542-3	RETAINER, INNER
2	D4542-5	RETAINER, INNER
2	D4542-7	RETAINER, INNER
1	D4543-1	RETAINER, LH OUTER (LOWER)
1	D4543-2	RETAINER, RH OUTER (LOWER)
1	D4543-3	RETAINER, LH OUTER (SIDE)
1	D4543-4	RETAINER, RH OUTER (SIDE)
1	D4543-5	RETAINER, LH OUTER (SIDE)
1	D4543-6	RETAINER, RH OUTER (SIDE)
1	D4544-1	RETAINER, CENTER
1	D4545-041	RETAINER, LH INNER (LOWER)
1	D4545-042	RETAINER, RH INNER (LOWER)
1	D4594-1	PLATE
1	D4595-150-25	SEALANT TAPE (25' LONG)
95	AN525-10R7	SCREW
112	MS20426AD3-4	RIVET
23	MS21059L08	NUTPLATE
56	MS21059L3K	NUTPLATE
10	MS21061L08	NUTPLATE
1	MS21075L08	NUTPLATE
22	MS27039-0810	SCREW
22	NAS1149DN832J	WASHER (OR AN960JD8)

DART SERVICE INSTRUCTION

TO AMEND INSTALLATION INSTRUCTIONS IIN-D206-817 REV. D
AND INSTRUCTIONS FOR CONTINUED AIRWORTHINESS ICA-D206-817 REV.2
OR LATER APPROVED REVISION
REF. TCCA STC: SH12-3
REF. FAA STC: SR03091NY
REF. EASA STC: 10039042

1.0 PURPOSE

AT CHG 004 AND SUBSEQUENT, THE D206-817-011 SCREW-IN WINDSHIELD MODIFICATION KIT WILL NOW INCLUDE 2x D4595-150-13 SEALANT TAPE (13' LONG) IN LIEU OF 1x D4595-150-25 SEALANT TAPE (25' LONG) IN ORDER TO AVOID THE EXPIRATION OF UNUSED TAPE SHOULD ONLY ONE REPLACEMENT WINDSHIELD BE NECESSARY.

2.0 PARTS LIST

WAS:

QTY -011	Part Number	Description
X	D206-817-011	SCREW-IN WINDSHIELD MODIFICATION KIT (MODIFIES BOTH LH & RH WINDSHIELDS)
1	D4595-150-25	SEALANT TAPE (25' LONG)

IS:

QTY -011	Part Number	Description
X	D206-817-011	SCREW-IN WINDSHIELD MODIFICATION KIT (MODIFIES BOTH LH & RH WINDSHIELDS)
2	D4595-150-13	SEALANT TAPE (13' LONG)

3.0 INSTALLATION

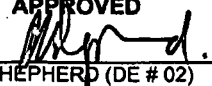
INSTALL THE D4595-150-13 SEALANT TAPE IN THE SAME WAY AS THE D4595-150-25 SEALANT TAPE PER IIN-D206-817 REV. D OR LATER APPROVED REVISION.

4.0 WEIGHT AND BALANCE

THIS CHANGE HAS NO EFFECT ON THE WEIGHT AND BALANCE.

CANADA
DEPARTMENT OF TRANSPORT
AIRCRAFT CERTIFICATION
BRANCH
DAO # 01-O-01

APPROVED

BY: 
D. SHEPHERD (DE # 02)

DATE: 13.06.20
CERT. NO.: SH12-3
ISSUE NO.: 1

A	NEW ISSUE		13.06.20
REV.	DESCRIPTION	BY	DATE
DESIGN		DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN			
CHECKED		DRAWING NO.	REV. A
MFG. APPR.	N/A	DSI 9659	SHEET 1 OF 1
APPROVED		TITLE	SCALE
DE APPR.		SEALANT TAPE	NTS
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DART SERVICE INSTRUCTION

TO AMEND INSTALLATION INSTRUCTIONS IIN-D206-817 REV. D
& INSTRUCTIONS FOR CONTINUED AIRWORTHINESS ICA-D206-817 REV. 2

REF. TCCA STC SH12-3

REF. FAA STC SR03091NY

REF. EASA STC 10039042

1.0 PURPOSE

THE PURPOSE OF THIS DART SERVICE INSTRUCTION (DSI) IS TO FACILITATE INSTALLATION OF THE RETAINERS ON THE LOWER PORTION OF THE WINDSHIELD, FOR D206-817-011 KITS AT CHG 005 OR LATER, BY REPLACING THE RIGID D4545-041/-042 RETAINER ASSEMBLIES WITH SEPARATE BRACKETS AND RETAINERS THAT ARE ASSEMBLED BY THE INSTALLER AND ALLOW FOR EASIER ADJUSTMENT.

2.0 PARTS LIST

(IS)

QTY -011	PART NUMBER	DESCRIPTION
X	D206-817-011	SCREW IN WINDSHIELD MODIFICATION KIT (MODIFIES BOTH LH & RH WINDSHIELDS)
1	D4541-1	BRACKET
1	D4541-2	BRACKET
1	D4542-1	RETAINER
1	D4542-2	RETAINER
190	MS20426AD3-4	RIVET
43	MS21059L08	NUTPLATE
93	MS21059L3K	NUTPLATE
2	MS21061L3K	NUTPLATE
42	MS27039-0810	SCREW
42	NAS1149DN832J	WASHER

(ADDED)

(WAS)

QTY -011	PART NUMBER	DESCRIPTION
X	D206-817-011	SCREW IN WINDSHIELD MODIFICATION KIT (MODIFIES BOTH LH & RH WINDSHIELDS)
1	D4545-041	RETAINER, LH INNER (LOWER)
1	D4545-042	RETAINER, RH INNER (LOWER)
112	MS20426AD3-4	RIVET
23	MS21059L08	NUTPLATE
56	MS21059L3K	NUTPLATE
22	MS27039-0810	SCREW
22	NAS1149DN832J	WASHER

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AIRCRAFT CERTIFICATION
BRANCH
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ISSUE NO.: 1

A	NEW ISSUE	AJS	14.03.18
REV.	DESCRIPTION	BY	DATE
DESIGN	AJS	DART AEROSPACE LTD	
DRAWN	AJS	HAWKESBURY, ONTARIO, CANADA	
CHECKED	A	DRAWING NO.	REV. A
MFG. APPR.	N/A	DSI 9687	SHEET 1 OF 4
APPROVED	14.03.18	TITLE	SCALE
DE APPR.	14.03.18	RETAINER UPGRADE	NTS
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